

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)

IRINA LIANA BOGATU

Address(es)

PAULESTI, ROMANIA

Telephone(s)

Mobile:

E-mail

Office: liana.bogatu@upg-ploiesti.ro; Private: lianabogatu@gmail.com

Nationality

Romanian

Date of birth

Gender

Female

Position

Associate Professor

Petrol and Gas University-Ploiesti

Reviewer

Horizon Journal of Engineering and Manufacturing Technology, Revue Roumain de Chimie, Bulgarian Chemical Communications, Petrol and Gas University-Ploiesti Journal, Ovidius University Annals of Chemistry.

Work experience

Dates

2010 – present

Occupation or position held

Associate Professor

Main activities and responsibilities

Conducting the following university courses: Petroleum Processing Technology, Hydrocarbon Processing Technology, Lubricants and Additives, Distillation processes and technologies, Thermo – Catalytic processes, Food safety and traceability in the food chain.
Conducting the laboratory and seminar activities related to the above mentioned courses.
Coordinating students' bachelor's and dissertation theses
Coordination of the student's research studies.

Name and address of employer

Petrol and Gas University-Ploiesti, B-dul București, nr. 39 , cod 100680,Ploiesti, Romania

Type of business or sector

University Education

Dates

2016-present

Occupation or position held

Expert Evaluator for European Commission

Main activities and responsibilities

SPIRE-02-2016, SPIRE-09-2017and HORIZON-CL4-2021-RESILIENCE-01-09 Projects evaluation

Dates

2010 – 2015

Occupation or position held

Project Technical Advisor

Main activities and responsibilities

Monitoring of two research projects in the frame of FP7-NMP Theme Collaborative Project.
The project purposes are as follows: capture of evaporated water with novel membrane and nano-structured TiON Photo-Catalytic membranes for water treatment.

	<p>The main responsibilities consist in:</p> <ul style="list-style-type: none"> - Providing scientific, technical and administrative assistance to projects while monitoring their quality and outcomes; -Monitoring tasks of scientific progress, project management, technical reporting and management reporting; -Providing suggestions and advices for projects' successful completion.
Name and address of employer	Cooperation agreement with BreakingResearch.com, 28, Route de Mersch, L-7780 Bissen, Luxembourg.
Type of business or sector	Technical assistance services to the European Commission
Dates	January 2009 – present:
Occupation or position held	Head of Centre of Excellence; Senior Researcher
Main activities and responsibilities	<p>1. Coordination of research and development activity of the Company.</p> <p>2. Coordination of the Company testing laboratory and consultancy.</p> <p>1. Coordination of research and development activity of the Company.</p> <p>1.1 Project director (as consortium partner) of international project "New sustainable compressor oil production and use. Towards a long eco-efficient life cycle", SIXTH FRAMEWORK PROGRAMME PRIORITY 3, 2005-2009</p> <p>Responsibilities, tasks and achievement in 2009:</p> <ul style="list-style-type: none"> - study of replacement influence of antioxidant additive by nanoporous materials on the oxidant resistance capacity of the new designed compressor oil; - evaluation of the new compressor oil behaviour in real condition of work: monitoring of structural transformation and influence on the main characteristics; establish limits of admissibility for the specific characteristic of oil in order to ensure a safe operation; - study of the capitalization possibilities of the used compressor oil, by correlation between the specific chemical structure of the used oil and specific requirements of different applications. <p>1.2 Nominated project director for a new international project proposal, EUROSTAR, "Development and Testing of Sustainable Biodegradable Concrete Demoulding Fluids from Vegetable Waste Oils", submission on 25th of September 2009. Main objectives of the project:</p> <ul style="list-style-type: none"> - development of sustainable and environmental friendly concrete demoulding fluids, based on vegetable waste oils and other suitable waste products; - testing of the new demoulding fluids for most common concrete moulding applications and development of a new standard testing method of the new materials in correlation with specific application; - assessment of the environmental performance of the demoulding fluids and a market study and role out plan for placing the product in the market. <p>2. Coordination of the Company testing laboratory and consultancy</p> <p>2.1. Quality control of company products manufacture;</p> <p>2.2. Evaluation and expertise of lubricants quality by different solicitants request;</p> <p>2.3 Technical assistance and consultancy for the company' clients and for other solicitants</p>
Name and address of employer	SC ICERP SA, Bv.Republicii, No.291A, Ploiesti,Romania
Type of business or sector	Manufacture and research in the field of lubricants, additives and connex products.
Dates	2004 – 2008
Occupation or position held	Manager of Industrial and Engine Lubricants Department/ Senior Researcher
Main activities and responsibilities	<p>1. Project manager - for national and international research projects and programmes.</p> <p>2. Coordination of industrial and engine oil testing laboratory and consultancy</p> <p>1. Project manager - for national and international research projects and programmes.</p> <p>1.1 Project director of national project "Alternative technical solutions for lubricating oils obtained from renewable feed stocks that satisfy the competitiveness and environmental protection European exigencies", 2006-2008, MATNANTECH national programme.</p> <p>Responsibilities, tasks and achievements</p>

- study of the technical alternative solution of petroleum derivate oils in respect of traditional energy resources preservation;
- evaluation of the different type of renewable raw materials in accordance with the specific requirements of lubricating base oils; comparison between the new materials and the traditional mineral base oils, elaboration of scientific solution in order to solve the identified weak points;
- design of the new technology of lubricants elaboration from renewable raw materials;
- testing and evaluating of the new type of lubricants in correlation with the competitiveness and environmental protection European exigencies.

Main activities and responsibilities

1.2 Project director (as consortium partner) of international project "New sustainable compressor oil production and use. Towards a long eco-efficient life cycle", SIXTH FRAMEWORK PROGRAMME PRIORITY 3, 2005-2009

Responsibilities, tasks and achievements 2005-2008:

- Establishing the new compressor oil requirements;
- Developing, testing and characterisation of a new lubricating raw material based on glycerine by-product from biodiesel manufacture process;
- Design of laboratory technology of the new compressor oil lubricant, based on the new raw material (poly glycerol esters from glycerine) and suitable additives;
- Study of the nanomaterials influence on the new compressor oil oxidant resistance
- Up scaling of the new compressor oil laboratory technology to pilot level and producing larger quantities of the new lubricant in order to test on compressor equipment.
- Study and monitoring of compressor oil behaviour on real conditions of work and estimation of admissibility limits for the specific characteristics that ensure a safe operation of the oil;
- Delivery of the specific and relevant data for life cycle assessment of the new compressor oil.

1.3 Nominated project director for a new international project proposal, FP7, "Development of industrial and ecological solutions for the formulations of bio-lubricants based on lunaria answering the European environmental directives on lubricants", submission on 11 th of April 2008, Call title: FP7-SME-2008-1, stored on the EPSS system with number 232283. The proposal was not granted.

Main objective: Developing formulations of powerful lubricants starting from ingredients and additives resulting from renewable and ecological raw materials that answer the European criteria of "Eco-label", by focusing development and research activities on the lunaria vegetable species that has a high content in long chain fatty acids and exceptional lubricating properties.

1.4 Project director of national project "Highly biodegradable ecological multifunctional fuels and lubricants", 2004-2006, MENER national programme.

Responsibilities, tasks and achievements:

- reviewing of the new requirements and EU regulation in the field of the fuels and lubricants and identification of the technical and environmental impact;
- design and evaluation of the potential solution for biodegradable fuels and lubricants manufacture;
- research study about the possibilities of biodegradable fuels elaboration from vegetable oils; process based on transesterification of the vegetable oils with methanol by acid or basic catalytic process;
- research study of the technical solution of biodegradable lubricants elaboration based on vegetable oils raw materials; study of the chemical compatibility between the new type of lubricants and traditional ones, specific influence on the formulation composition, correlation between resulted characteristics and the imposed requirements.

1.5 Project director of commercial research contract "Elaboration of the package additives for automotive gears GL4, GL5 performance level oils production technology, 2005, ICERP company research and development programme.

Responsibilities, tasks and achievements:

- Study of the mechanism interaction of different extreme pressure additives formula; - Study of additives chemical structure influence within different lubricant additivition formula and different structure of used base oils.
- quantification of the chemical structure and interaction mechanism influence in relation with requested conditions of high level API GL4, GL5 gear oils;

1.6 Member of the technical team of the project "Special lubricants designed according to international standard level for modern Diesel engines locomotives equipped with silver bearings", 2004-2006, RELANSIN, national programme.

2. Coordination of industrial and engine oil testing laboratory and consultancy

2.1. Quality control of industrial and engine oil company manufacture;

2.2. Evaluation of lubricants provided by different solicitants.

2.3 Technical assistance and consultancy in the field of lubricants for the company clients and for other solicitants (industrial and engine oils consumers).

Name and address of employer

SC ICERP SA, Blv.Republicii, No.291A, Ploiesti, Romania

Type of business or sector

Manufacture and research in the field of lubricants, additives and connex products.

Education and training

Dates

2007 – 2010

Title of qualification awarded

Philosophy Doctor Degree

Principal subjects/occupational skills covered

Leading subject of the PhD thesis: "Lubricants based on renewable raw materials"

2007-2008: Graduated examinations in the frame of the PhD preparation (5 exams): "Instrumental analysis"; "Enhanced Environmental technology"; "Biotechnology"; "Statistics and Experimental design"; "Organic Chemistry".

2009: Work papers in the frame of the PhD preparation (3 work paper):

"Study of the additives interaction mechanism within vegetable lubricants composition";

"Environmental impact evaluation of the renewable raw materials based lubricants": the study includes testing research concerning vegetable and regenerated used oils also.

"Study of the extend application possibilities of the renewable raw materials based lubricants".

2010: Final thesis: "Lubricants based on renewable raw materials".

Name and type of organisation providing education and training

Petroleum and Gas University of Ploiesti

Level in national or international classification

Philosophy Doctor Degree

Name and type of organisation providing education and training

Petroleum and Gas University of Ploiesti, Romania, Faculty of Petroleum and Gas Chemistry.

Level in national or international classification

Diplomat Engineer / Master of Science

Personal skills and competences

Mother tongue(s)

Romanian language

Other language(s)

1. English; 2. French

Self-assessment

European level ()*

Language

Language

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
1	B2		C1		B2		B2		B2
2	B1		B2		A2		A2		B1

() Common European Framework of Reference for Languages*

Social skills and competences

Responsibility, seriousness, good communication aptitude, outspoken, dynamic, trusty, sense of humour, persuasion.

Organisational skills and competences

Initiative, leadership, dynamic, self motivation preoccupation for continuous improvement of career. Time management and teamwork, they are natural skills but also competences acquired during career time, especially after 1996 when I have coordinated different departments: Quality Assurance Department., Testing Laboratory, Research Department.

Technical skills and competences

Engineering sense, Innovation skills, logical approach of the matters. These skills were developed at College and University degree time and more during my career.

Computer skills and competences	Microsoft Office: Word, Power Point, Excel. Professional training courses organised by the Company.
Other skills and competences	Member of Scientific Committee of International Colloquium Energy and Environmental Protection 2016, 2018, 2023, OilDoc Conference, Rosenheim, Germany 1-3 February 2011 Member of Romanian Chemistry Society since 1996. Artistic skills and competences - Vocal sing and piano. I have exercised the musical skills in the High School of Arts, Ploiesti in a professional way and in the period of University Degree as a hobby.
Driving licence	Driving licence, B category.
Additional information	SEE ANNEXES
Annexes	1. LIST OF PUBLICATIONS

1. LIST OF REPRESENTATIVE PUBLICATIONS

- 1.1 Bogatu, L., Evaluating the environmental impact of different energy sources, fossil or alternative, through the life cycle assessment method, VOL. V (LXXVI) • No. 2/2024.
- 1.2 Bogatu, L., Efficient use of used lubricants, Romanian Journal of Petroleum & Gas Technology, VOL. III (LXXIV) • No. 2/2022
- 1.3 Bogatu, L., Doicin, B., Onutu, I., Prediction method of the turbine oils life-time, Revista de Chimie, 2019, Vol.70, nr.11, p.4007-4012, ISSN 0034-7752.
- 1.4 Bogatu, L., Dragomir, R., Rosca, P., Efficiency of antioxidant additives mixed in vegetable oils, Revista de Chimie, 2016, Vol.67, nr.1, p.157-161, ISSN 0034-7752.
- 1.5 Tănăsescu, C., Bogatu, L., Popa, C., Efficient application of vegetable oils in deep drawing processes, Journal of the Balkan Tribological Association, 2016, Vol. 22, No 4-II, p.4099-4108, ISSN 1310-4772.
- 1.6 Radulescu, A., Bogatu, L., Radulescu, I., Rheological methods for evaluation of the base oils obtained by conditioning of hydraulic used oils, Journal of the Balkan Tribological Association, 2016, vol.22, No.4-IV, p.5037-5045, ISSN 1310-4772.
- 1.7 Dragomir, R., Bogatu, L., Rosca, Benzene management in refinery gasoline, Revista de Chimie, 2016, vol. 67, nr. 12, p.2600-2604, ISSN 0034-7752.
- 1.8 Bogatu, L., Dragomir, R., Influence of additives on antiwear and extreme pressure behavior of the vegetable oils, Revista de Chimie, 2016, Vol.67, nr.4, p.630-633, ISSN 0034-7752.
- 1.9 Bogatu, L., Dragomir, R., Suitable compositions for efficient deep stamping lubricants, Revista de Chimie, 2015, Vol. 66, nr.5 p.722-726, ISSN 0034-7752.
- 1.10 Dragomir, R., Bogatu, L., Rosca, Upgrading of the FCC gasoline quality, Revista de Chimie, 2015, Vol.66, nr.12, p.2091-2096, ISSN 0034-7752.
- 1.11 Dragomir, R., Bogatu, L., Rosca, P., Oprea, E., Juganaru, T., Biodiesel produced by two step hydroprocessing of waste cooking oil, Revista de Chimie, 2015, Vol. 66, nr.4, p.552-555, ISSN 0034-7752.
- 1.12 Bogatu, L., Onutu, I., Cursaru, D., New alternative for conditioned oils revaluation, Journal of the Balkan Tribological Association, 2015, Vol.21, book 1, p.222-232, ISSN 1310-4772.
- 1.13 Bogatu, L., Influence of chemical structure changing on lubricants behavior in service, Revista de Chimie, 2014, Vol. 65, nr.10, p.1230-1234, ISSN 0034-7752.
- 1.14 Bogatu, L., Tănăsescu, C., Optimum Balance between extreme pressure and antiwear additive from gear lubricants, Revista de Chimie, 2013, Vol. 64, nr. 8, p.904-908, ISSN 0034-7752.
- 1.15 Cursaru, D., Neagu, M., Bogatu, L., Investigations on the oxidation stability of biodiesel synthesized from different vegetable oils, Revista de Chimie, 2013, Vol. 64, nr. 4, p.438-441, ISSN 0034-7752.